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## REGULARS

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A broad mixture of games and machines. Read before you buy

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## 2X USER

Another FREE magazine for all Spectrum and $Z \times 81$ users Here's what's in store for you:

- Spectrum software reviews - the hot news
- Don't get in a tangle in our fun game
- Play bowls on the village green
- Gamble on the luck of the draw
- Save injured passengers after a train crash

For further details look at the contents on page three of your 16-page ZX User

Editor: Paul Lipirot Asphenal Edtios: Liz Graham Designer: Bryan Pitchford

Elspeth Joiner

Advertisement Manager: John Quint
Asplatam Adverlisemeah Mamaget: Stuart Shield

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Clexifled Advertimg: Debra Stupple Chief Execulive Jim Connell

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## PREPARE FOR A TEST OF ENDURANCE...


...an Olympiad spectacular from Soflware STUDIOS

## FAST

From front page
be ploughed back into improved products.
Members of FAST include some of the biggest names in both business and home computer software, plus several trade associations.
The chairman is Donald Maclean, deputy chairman of Thorn EMI Video. He said: "Software theft is a major threat to the whole computer using community. It is in everyone's interest that this problem is tackled now:'
FAST's management group includes Nick Alexander, managing director of Virgin Games, and chairman of the Guild of Software Houses.
Welcoming FAST's formation, Mr Baker said: "The software industry is a very important and quickly-growing sector of the British economy.
"It is already a major contributor to national wealth and employment in this country, and it is essential that it should be in a position to protect itself against unlawful copying."

He went on to offer support and encouragement to FAST. Federation Against Software Theft, Chancery House, Chancery Lane, London WC2A IQU

## Imagine

From front page
$£ 400,000$, including $\$ 100,000$ to a bank and $\mathbf{E 2 5 0 , 0 0 0}$ to Marshall Cavendish, due to be repaid after an abortive programing deal where software was to be given away with a partwork.

Staff at Imagine say that Finchspeed is taking over the company's "megagames", boxed sets called Bandersnatch and Psyclapse. Imagine would get 50 per cent of the profits.

Finchspeed is also said to be buying $£ 43,000$-worth of equipment from Imagine, with a 10 per cent deposit.
Rights in lmagine's other games, including two unreleased titles, have already been sold.

Finchspeed is also believed to be offering jobs to 20 of Imagine's 71 staff.

Mr Lawson and Mr Butler both own 45 per cent of Imagine and the remaining 10 per cent is held by Steve Blower, boss of the now-defunct Studio Sting, said Mr Blower, Until its collapse, Studio Sting did much of Imagine's artwork.

The three met to discuss the transfer and, said Mr Blower,


Eddic Kidd holds the world record for his daring bike jumps - he's cleared 14 doubledecker buses, a distance of 190 feet. Now he's endorsing a computer game which challenges you to match his exploits.
Martech is the company working on this project, and details of the Eddie Kidd game, Jump Challenge, are being kept a secret. You'll have to equal Eddie's skill, timing and control as you leap over increasingly difficult obstacles. However, there's one reassurance - at least your life isn't at stake, unlike Eddie's astounding jumps, so even the yeilowest of cowards amoung you can be successes.
Jump Challenge is due for release in August, for the Commodore 64 and 48 K Spectrum to begin with. A national competition will serve as an extra challenge. Eddic Kidd will be helping promote the game and making personal appearances on the Martech stand at several compurer fairs.

Martech, Martech Hse, Bay Terrace. Pevensey Bay, E Sussex BN24 6EE

## Help with bank baiance

Keep a record of all your expenditure, with Money Manager, from Creative Sparks. A budgeting routine helps you plan your finances and there are seven different methods for cash analysis and interest calculation.

The program funs on the 48 K Spectrum and costs $£ 6.95$. Creative Sparks is Thorn EMI's range of home entertainment software.

Creative Sparks, Thomson Hse, 296 Farmborough Rd, Farnborough, Hants

## Software houses merger

Mastertronic has joined forces with Galactic to form a new company which will be known ${ }_{35}$ Al Products. Mastertronic is the games company which has hit the headlines through selling its games at the slashed price of f1.99.

The reasons Mastertronic give for this joint venture are to secure a continuing source of software and to broaden the
base of the operation beyond games.
AI Products intents to widen its horizons by including business and educational software. Games will be in the minority. Said Martin Alper, director: "You can expect to see budget ranges of business and educational software on the market by early autumn.
"We want to prove that top quality programming can be achieved at a fraction of the current market prices,' he continued.

Mastertronic claims to have sold over a third of a million games since its launch on 2nd April.
Mastertronic, 48 George St, London WI HSRF

## Ocean's away with new games

Ocean is due to release High Noon in August. This is a 3D wild-west drama. Shades of old Clint Eastwood movies linger on in this game; one of the characters is Rigor Mortis, the creepy undertaker, who loiters around waiting for business. A Commodore 64 version is scheduled for release in August, followed by a Spectrum version in September.

Also from Ocean in July: Stuntbike and Jonny and the Jimpys, for CBM 64. Jonny and the Jimpys ( $£ 6.90$ ) is a twogame package, with the hero of the game being our Jonny. Side one is a battle with witches and side two involves Jonny feeding his dog and running through a maze.

Ocean, 6 Central St, Manches. fer M2 5NS

## Thieves nalb tapes

PSS has been having trouble with burglars recently. PSS premises in Coventry were broken into and three unreleased computer games tapes and six master discs were stolen, as well as a computer.

Managing director Gary Mays said: "It smells very much of a black markef operation. They knew what they were looking for. I lind it very suspicious:'
Mr Mays blamed the thefts on sofiware pirates who copy tapes and sell them on the black market at reduced rates. "It could be crippling for a firm such as ours," he said. "It takes us at least three months to develop new games and our loss could be as high as $£ 10,000$ ?'

## SUPER SAVERS

| SPECTAU* | A.R.P | OUR | Cowmbenin 61 | RRP | $\begin{aligned} & \text { oun } \\ & \text { PRICE } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
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| C59 | 25.20 | SKRANBE |
| 455 | [520 | THE PITZ |
| 4595 | 2520 | THE CUNGEONS |

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## PiKaDee Software FOR THE UNEXPANDED TI-99/4A

PKDI: GRAPHICS CREATOR \& SCREEN EDITOR
e5.95
Tkis highty praised uzility program makes the creation of graphis and Iarge screen layouts quick and simple. Commands include MJRROR, ROTATE, INYERT and many more. HCW No. 54 said "A Must For all TI Owners"... Instructions 100\%; Ease of Use $95 \%$ Display $95 \%$ Value for money $95 \%$. Price includes full instructions and 3 sets of demographics.
PKD2: MUSIC MAKER by David Meril. TT-LUDO by Ray Hollingworth
85.95 CHARSET ONE (BOL.D)
Three high-quality programs on one tape. MUSIC MAKER is a novel way to play with TI's sound. Notes are entered onto 2 musical staves and can then be edited in different ways. They car be played back with 1,2 or 3 voices or with en echo. Mary commands. Full instrations and demonstration tune inchuded. TILUDO is welassic version of the classic board game. You can play your lriends and/or the compuler. I to 4 players can take par. CHARSET ONE (BOLD) is a complete ready-to-use chazweter set whict will enhance your own progranus 100\%.
PKD3: RIVETS: by John Hioworth
CHARSETTWO(PICA)
44.9

Arcade action with Riven! You have to pick up all of the rives left lying around by your workmates. The boss is liming you so you had better be quick. Beware the banatas skins and dop't run loo quick as it'sa long wiy down to the ground. \$ skill levels. 21 floors. Timer. "Thit it o must for all game players.' CHARSET TWO (PICA) is the second off-the-shelf character set for yeur own games. Instructions included,

PKDA: ESCAPE FROM MICA! by B Dhooper
4.95

This has to be the most iddictive arcede garme yel for your uner-T1-99/4A You've been captured by the Count of Miea. To secure your release you have to sollect valunble items from 3 fields. These ficids are guarded by a terrifying monster who eats prople like you for dinner!'l The Couns has given you 4 Hyperspace pilts - ose them wisely. This is a very entertaining game with 4 skili fevels, anlmaled running, good graphics, sound and a High-Score (able. Nol to be missed!

## Al chequen, PO's me... וo PiKaDee Software 35 Parker St PRESTON Lancs PR22AH



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Tape RClazines
Great games, great utillies all for only £3.99. Available for Spectrum, Alari, Vic 20, BBC B, and CBM 64 through W.H. Smith, Menzies and computer stores. Really use your computer this summer.

## Clever Clogs

8 great fun games for whizzkids. Change the difficulty with data packs on Science, The Arts \& General Knowiedge.

On sale in W.H. Smith. Keep your Clever Clogs busy all summer longl Awallable for Spectrum at $£ 6.95$.

## Mind Cianes:

Recently launched, the new name in quality strategy and adventure games. Top writers and programmers open the door to the world of imagination and fantisy. Have an adventure thls summer whth Star force Seven, Quest for Eternity, and

Orion Quest. Spectrum $£ 7.99$, BBC B , and CBM 64 E9.99.

## Fall of Rome

Five million barbarians, an army or two of Persians, severd thousand upset Armenians, fifty legions of linerant Italians . . . . . and you!
Have a holiday at home and save clvilsation, Avallable for Atari, BBC B, Spectrum A Commodore 64.
 ten with great games like Ant Attack, Boogaboo, Fred, Mined Out and 5 nowman. Prices from $£ 4.95$ to $£ 7.95$. Available from W.H. 5 mith, Boots and Menzies and leading Computer Stores worldwide.

## Devil Bird Unexpanded Sord M5 55.95

CGL，CGL Hse，Goldings Hilt， Loughton，Essex IG10 2RR

According to the inlay card，you are altacked by the Devil Bird． You can fight back by firing your laser gun ast it．
In fach，in this 100 per cent BASIC game，the Devil Bird is randomly moving sprite and your ship is the traditional laterally moving base．Since there is only one Devil Bird on the sereen as once，it moves swiftly，although very jerkaly． The base responds very slowly and so you feel frustroted as you desperately try to dodge the deadly ray，When you blast ßive Devil Birds，you go on to the next screen to meet another
bunch．The best I maraged was three，due to the slow conirol responses．
Screen layout is zood and sprites are well defined． However，the incredibly powerful graphics and sound capatilities of the Sord cannot be fully exploised by the rather simple BASIC－I and this fact becomes painfully obvious in this game，which attempts to emulate an ercade game．As it is torally unprotected，you might like to study how it＇s written，but at E5．95，I can＇t recommend it very highly．

## instructions

## $50 \%$

playability 6050
graphics
value for money

## 大。大

## Erainstorm 32K BSC E7．95

Virgin Games， $61 / 63$ Portobello Rd，London W／1 3DD

Erainstorm is a unique game designed to test the skill，logic， memory and nerve of the two oppotents．The idea is to fire ： laser bean directly ino your opposent＇s brain．This may not sound too taxing but the laser beam is directed by altering the deflection fuctors of your prisms．Complicated，eh？Onee you＇ve mastered the maths the game itself is very interesting．
Players take it in turn to position their prisms，to which they give a deflection factor．The direction in which the theser is travelling before it hits the prism
will decide which direction leaves．
Once you have positioned your mrism and sem the deflection factor the laser is fired．It will hit 25 prisms before running out of power，athough it is more likely to leave the screen or hit a brain firs．
Brainstorm can be put on a parallet with chess and must be just as，if not mare，complicated． I woulda＇t fetommend it for children but it＇s greal for a game which needs thouglt．

| instructions | $85 \%$ |
| :--- | :--- |
| playabilly | $60 \%$ |
| graphics | $90 \%$ |
| value for money | $80 \%$ |

value for money

## 女齐交交

## Tules of the Arabian Knights CBM 64 E7

inteeceptor Micros，Lindoan Hse， The Green，Tadley，Hants
At one time computer games were bimited to text displays． Then came graphics and later music．Inlerceptor in going one sep further by lacluding speech in its programs．
The game is based upon getting your man througha a series of sereens and surviving the obstacies blacking your way such as genies，crocodiles and barrels． Players of Krazy Kong should find it exciting，Excellent kraphics although your playing man lacks detail．
Music plays continually through the game．The tune has been implemented well and complements the game．I hope more companies will try to attain the slandards of sound achieved in this game．
Before you start one of the screens a small description of your task is displayed．The Wcomputer also tells you this out D of the TV speaker．No exirg hardware is required；it is all created through good software． Although the voice sounds rather like grandad with a sore throat， i＇s quite understandable．
The program comes with its Nown rast louding sysicm which 1 Ydidn＇t find very reliable and sometimes took two or three goes to load the game．）k．l．

## Revers！ Memotech MTX 87.95

Continental Software．Station Lanc，Witney，Oxon

Reversi is a computerised version of the board game Othello，in which two players take turms to place coloured counters on a chequer board．The aim is to bracket the other player＇s counters with your own． isolating a line of captured counters which change colour and join your side．The winner and join yout side，The winner
has the most counters of his or het colour when the board becomes full．

Simple though the iden is， Reversi is an addictive strategy game and a popular subject for compaterisation．This excelient program offers four levels of play against a human opponent．

> You＇ll find software reviews for all popular micros in HCW． Here＇s a selection for the Sord M5，Memotech，BBC and Com－ modore 64

## Where＇s my bones？ CBM 64 E7

## Interceptor Micros，Lindon Hse，

 The Green，Tadicy，HantThe tilke sounds interesting and no doubt will persuade acw＇s people io buy copies，Admittediy the screen displays look quite good．However there is a complete lack of lasting jnierest and skill．I used to think computer games were fun－not an endurance test．
The object is to move your ghost around a maze wlich scrolls up the screen as you move down．Precision is required because one or two pixels make all the difference．There is no fast emton，you simply tap the joystick to get to the correct position and then time your movement with a couple of missiles or blocks．
The graphics come in two different styles；rocky and brick walls，Each level contains a maze made out of one type of back－ ground and either missiles or moving blocks bar your way．
As you move，various demons appear．You can shoot them or smash inlo them，but you lose a shield eact time you touch a demon．
Loading problems were en countered from time to time，I blame the fast loading sysiem for this．）K． 1
instructions playability graphics value for money
instructions
$95 \%$
playability
$5 \%$
rㅜㄹphict
$80 \%$
giving a range of response times
between one second and 10 minutes．At the third level the Memotech plays a good game， resporiding in about 25 seconds． A bleep sounds when the computer has finished thinking Invalid moves are not allowed． Reversi uses a ciear and atiractive sypeface．At any point in a game you may quit or call up detailed instructions，change the colour scheme，or use a＂hint＇ facility which suggests your next move，Reversi is well－written， beautifully presented，but the price is perhaps a lizie excessive．

50




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## How It works

10-180 DIM arrays, read DAJA sinto a string
190-350 menu io choose to learn or be tested
$360-500$ prat out a list of symbols and valencies to be icamed
510-620 prant a list of the symbols to a printer
6.3. 790 sel up screen for S \& V
lest. Screen is divided 1010 sections by block graphics $800-970$ ask symbol and valency of a substance
980-10:50 clear the previous quesion and answer, jump
back for rext question
$1060-1310$ list wrong agswers to screers
1320-1500 list wroas answers to minter
1510-1630 input answers. The BASIC command INPUT Iends to destroy graphics on screen if used, as it has a carnage return at the end 1640-2000 dala statements which hold the subslances


## PROGRAM

As you no doubt know， tearning symbols and vaienctes of certain substances is a fundamental part of most science courses．
It caan be quite a difficult task to learn these values off by heart，but don＇t give up in despalr．Here＇s a Dragon 32 program which will help you overcome thus problem．
The program gives a list of substances to screen or printer． You settle down to commuturg these values to memory，then when you are confident，the program tests you．At the end of the test you are provided

## Varisbles

A5（60，3）holds all dall on substances
B\＄31）used to record which questions have been asked，th they were answered correctly A used in FOR，．．．NEXT loops A bolds number of correst answers
R holds random question number
$\mathbf{X}$ holds x co－ordinate when seting ap screen
$\mathbf{Y}$ holds $y$ sc－ordinate when setting up screen
As used with INPLT and INREYS statements

## Hints on conversidn

This program should RUN as u stands on the Tandy 32 K colour computer If you wish to conver it to any olher computer here are some of the Dragon＇s commands

CLEAR clears string space
ON GoSt B multiple branch statement
PRINT－ 2 primes all to a рплter
SETTX，Y，C）sets a point on the text screen to colour C The exsolution is $644^{-32}$
PRINT ©X prines at the point $X$ on the text screen．The sereen has 512 letters and is made up of 16 rows of 32 characiers

The rest of the commands are farly standard to moss BASICs
with a lust of the questions you answered wrongly．You can also see a rumang total of your score，to see what improve－ ments you have made．

The 31 substances included in this program are the common ones．If you whsh to amend the program，add more data and change lines $140,150,160,390$. $560,800,830,1170$ and 1380 ． Good luck with your revis．on ${ }^{1}$


.0 RTM .
.0 RTM .
MFEM
MFEM
4G RIM EYMEOLA AND VNENCY
4G RIM EYMEOLA AND VNENCY

* FEM
* FEM
|FFM
|FFM
OBTM
OBTM
BLAEM GY :AN SELLIAAN
BLAEM GY :AN SELLIAAN
WG FLH.
WG FLH.
,60 REME
,60 REME
I'W HEHA
I'W HEHA
\#.0C:5
\#.0C:5
1:CLEAR 5DO
1:CLEAR 5DO
140 DIM A\&COH.3
140 DIM A\&COH.3
MMg b1M mit!
MMg b1M mit!
Mm bIM (1)!3!
Mm bIM (1)!3!
[f0 |
[f0 |


HCN NEXT A
HCN NEXT A
14% PRJNFTAR(3)|"SYMBDLS AND YALENCY TEST"
14% PRJNFTAR(3)|"SYMBDLS AND YALENCY TEST"


G PFINTIPFINT
G PFINTIPFINT
220 T=6


```
26G FFINT
`G FRINTTAE,T)&"方 TEST E& U*
-2g m*INT
*E8GFEINT
TMO PFINTE422,"ENTER CHOICE
CO A|=1KEEY*
`|FA*="4" THEN CL.S&END
```




```
-E.f FOTD 120
AG RFM -FF*F**F******
O REM LIST SEV *
O KEMM-4*O*********
70 FOR A=B TO:
4,5% CLS
```



```
Yn
```




```
```

40 PRINT

```
```

```
```

40 PRINT

```
```

4 a FOR B=A=11 TG (A+5)+1」1
a F FRIMTAF E.1pl
440 F'RLNTYAS (20)

$\rightarrow \square \mathrm{NEXT}$
and NEXT B
4 PRINTEAK2, MPRESS A KEY TD CONTINUED "

+0. FUET $A$
6.09 FE TURN

52 REEM FFINT 日 ह


N12-

ACB FOR A= 5 TO


- RD NE MT A
-RE ME MT A
OR FRINTI $\because+$
NOM PHINTE Z."
619 PRINTE Z."


h4R GRNM TEAT S * v.
を \% nan
确 解 多

ond 4 + $\mathrm{ix}, \mathrm{si}, 4$


- 2 ! 5 T $(x, 12,4)$
- TR SE T (x, 1b.4)
140 SE 1 (x.20,4)
+5ल M



+TM NEXT
HRA FGR A=I IO 31
017 PR[NTEンA, "DUESTION NLIMBER "iAL
日 $\mathrm{D}_{\mathrm{g}}$ FRINTE9日, MMUMRER CORRECT IC;

BAB JF BTR1 TMEN 日TE


BSO PRINTETS4, "ENTER EYMAOL
日TG EOSU日 1516



UR9 FRINTETBS, "ENTER VALENCY $=$ -
4R FRINTE ZGS,



$94 \mathrm{C}=\mathrm{C}+1$
8\% R (R) =1
969 PRINTE43, "PGES5 A KEY TO CONTINUE: " 1
96 Prinietso





109 PRINTETCO,AF;
10:8 FRINTE450, As
1048 PRINT
105 NEXT A
1858 NEXT
18Gs CLS



119E RETM - MFITE WRONG *

$1: \mathrm{B}=1$
$112 \mathrm{R}=1$
it 7 胃 ta 5
IIGg PRINTN SUBSTAMCE";
10 FRINTE4FO, M
189\% REM \#****世*\#\#\#***

OAb FOR A＝TO 3

＝AD ME YT A
FORINTI ${ }^{\circ}+$
tox PGINTf $7, n$
bl
O．B NI：Ti HN


む＂タ is
TH FOR サ＝TD $6^{\circ}$



－Tf SET $1 \times, 16.41$
348 SE T（x，20，4）


T7由 SET（ $8, \gamma, 4$ ）
TEN SET（4，5，Y，4）
HANS FOP A＝I IO 3


B4 1F BIRI TMFN 日TO

时

## DRAGON 32 PROGRAM


1」79 FR日R A＝1 7032

：Aも 1 A， $3=R=8+1$
119 IF IF 12 THEN GaSut 1248
120円 NEXT A
1214 PRINTe4Ea，＂FRESS A KEY TO CONTINUE＝，
122 IF INKEY＊ 12 H THEN 122 保
12\％RETURN


1264 Bm
$\$ 774$ C노
$12 E \mathrm{BR}$ FRINT SUESTANCE＂।
1279 PRINTTAB（1日）＂＂AYMBOL＊
136R PRINTTAB（25）：VALANCY＂
1316 RETURN

13 R四 REM＊PRINT WFDNG

135 PRIMTC－2＊＂SUBTANCE＂

13ヶ月 PRINTC 2，个AB（2日）\％＝VALANCY
138 FOA AFi TO 31
139 IF $B(A)=2$ THEN COSU日 145 ？
140N NEXT A

42的 PRINTf 2
1430 FEETURN

1450 REM PRINF DUT E4Y

1470 PRINTE－Z，A\＄\｛A，1\};


（5ab RE TURN

Iร2 REH INPLT ROUTINE

1540 日里ㅍ․
15\％A

I57B IF AHーCHR＊（1）TH2N RETLAN
15UD PRINTA事：


IF At－CHRE（EI AND LEN（BS）＝IHEN ISAC

1620 IF LEN（BG） 3 TH TREN AETLAN
$\square$ cロT0 15w

1650 REM VALENCY DNE

1670 DATA मYDROGE： $\mathrm{N}_{1} \mathrm{H}_{4} 1$
16日G DATA LITHIUM，LI，I
IE9D DATA EODIUM，NA．
1 ）GU DATA POTAGSIUM，K＋1
171 D DATA 日ILVER，AG，
172 D DATA CHLDF1NE，CL， 1
173 D DATA BROMINE，BR， 1
174 DATA IODJNE，I， 1
1 75 D DATA NITRATE＂NOB，t
176 DATA HYDRDGEN CARPONATE，MCOZ， 1
177 DATA HYDROBEN ELK．PFATE，HSOH， 1
178 D DATA AMWONAM，NH4 ； 1

1日GA REM Y VALENEV TWD＊

1自的 DATA MA
IE＇S
1B4月 DAYA BARIUM，$B A, Z$
105
1BA DATA NTCKEL，NI， 2
1日7月 DATA COHPER，CU，
1E日 DATA TIN， $\mathrm{gN}_{\mathrm{N}} 2$
1 ETV DATA MERCURY，HE，
19 GR DATA DXVGEN，O，Z
191囚 DATA BLLPHER，B， 2
192日 DATA BLIPHATE， 804,2
1930 CARBDNATE $\mathrm{CO}, 2$
194 DATA SLLPHETE， 303,2
1956 DATA HYDROXIDE，OH，2

$197 \%$ REM＊VALENCY THREE

19 （198 DATA ALUMINILH，RL， 3
1990 DATA ALUHINILH，AL， 3
200n DATA IRON，FE，S
2015 DATA NITROCEH，N， 3
2月 2G DATA PHOEPTHORUS ${ }_{0} \mathrm{P}, 3$

2EAE REH＝VALENCY FDUR－



## TL－99／4AT LAVTERN TIL－99／4A SAVE £ £ £ ££＇S ON THESETI－99／4A GAMES




4 M＞BE
f Tir Mede Tonw（EASNC）

Limact the mystrien of itre bluek fower and

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## SPECIAL OFFER

You＇ve seen the reviews，your know the quality of Lantern Products．Mention this ad when ordering any of the above games and you will only pay $£ 4.95$ per tute！
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Games to remember from
INTRIGUE
SOFTWARE
Cranbrook Road，Tenterden，Kent TN30 GUJ

## COMPETITION

This is your chance to win Buzzard Bait, Microdeal's five-star game for the Dragon 32.

We're giving away 100 copies of Buzzird Hat to the wenners of this week's competuph. Buzzard Ban cosif 19.95 in the shops, so the hand-out is warth just on $£ 1000$
Euzzard Balt is prolected by the infamous dongle. Take this opporturuty of examining the litite black box whach plags into your joystick port and must be present whenterer you load the game. It's an oraginal way of bearing the prates.
The game received rave reviews from HCW's regular reviewer. Who's a seasoned, perhaps cyment crusc. He went banatas over ft, clanming the graphics were the very best he'd ever seen on the Dragon. "Great... will provide you with many happly hours of relatively non-violent fun", he wrose, "A real winner which I would like to sete on other machthes too: he conlinued, awarding it $395 / 400 \mathrm{morks}$.
Buzzard Ball is fase, exchting fousting game. The riders are mounted on birds and you muss ioppic your entemy from his steed and turn him into an Ggo. As the game progresser, land masses crumble awdy, giving you more room to fly and alowing sirategic manoebving
If you stay on onte wave for some tume, the pterodactyl appears, If it touches yout, youtive had it. You can only kill it by jousitng it in the itroat (who said It was mon* voolent?). Perhaps it's best to avold Irouble al this staye, and steer clear all together

As the game progresest, leva

## Buzzard Bait: 100 copies to be won from Microded

clearly the number of differences yout found on the back of the envelope.

Post your entry to Mierodeal Competition, Home Computing Weekly, No. 1 Golden Square, London WIR 3AB Entsies close et firss post on Finday August 3, 1984
You may enter us manty tumes as you wish, but each eniry must be ont att offictal coupon - not a copy and seatiod in a separait envelope Important: please follow carefully the gutdelines on entering -incomplete coupons and entries in envelopes watk no numbers on the back cannol be considered If you are winner, the coupons will be used as alabel to send your prize so clear writiag is essentital

## The rules

Eintriet will thet bs accepted from amployes of Argus Specialist Publica. nont, Microden and Alabaster Passmore a Sons. Thit testitition also appliet to ermployees fumatet ind mentl of the сотраилеs
The How 10 Erier section forms part of the fules,
burns away the bridge, Warch out for the hident danger - the Leva Monster which skulks th the murky depths and reaches out to grab unsuspecting bitds and draf them to their deriths in the boiling tave. There is no escape once you have been touched ${ }^{\prime}$

Find the differences and you stand to with ths brillang game. So what pre you wating for?

## How 10 enter

Sulty the two cartoons - Ihere are a number of differences between them. Citcle the differetiow on cartoon 8 and seal the cartoon and coupon in an envelopes. Write

## Microdeal Competition

## Entry Coupon

Name
Address $\qquad$


## Progpack TJ－99／4A E

T．Wilmote， 3 Somerset Pace， Somerset Bridge，Bridgewater TA6 6L ${ }^{W}$

Games to suit everyone＇s finte Ten in ald，tholgh I roald onvy get mate to load．Nevertheless， quite remarkable value for a fiver，Here＇s a quick ran down of the ttles．

Supp Thiel－collect and chose same witere © foremas wanders round seaffolding drapp ng livers Lucky you must mick them up，for as kong as you can
Rave Atfactly－you hate five aser canons to defend aganst an ialnen anark，Yery adductive． Dat Blater－sell enplatiatory Hnatile UfO＇m－ahens again， that swop and bomb the time． Tressure Secker－dig around
seasciting for mapps and treasure． Cave Adventure－the one that woutdin＇t load，but，from reading the instractuons，would appear to be a standard adrenture Alien Overma $=$ differently coloused altens move extoss screen．Zap them to survive－
Robo－killet takes some trink mig abots，Your tath 战 to kill 12 robots by lyynt pellars and bombs，bu they close in on you after every move．
Mystery Game－infuriating but entertaining．

Wht，there they are What more could any sofiware bungry Tl owner want exselient gatmes at a glyeaway price

J $\mathbf{w}$ ．
instructions
paydbial）
950 praphtcs

value for mones

## 

ophyss emerges from its den This ophyss must also grow io 15 untis．
The opponent＇s tail may also be eaten．Thus does nol gave any mpurnthment，but 20 poinis are garned．When ophyss has bere boten．if is parulvised for ont move，ta if pasilule
should be butcen agals．
In the one－player version of the garte，the compuser consfols the opponent＇s ophyss，and there are seven levels of difficuilly．

Oycrald，a good yame that would be even better if in machine code on another cormpuier
unstructions
masatuld
oqraphes
value for money
Totratach
d． 1.

## $040 \%$ <br> $8 x^{\circ}$ ＊） 

## y I

## Dponys <br> TI－99／4A E6

Stainters， 10 Afstane R3，Teck port，Cheshure \＄1．45AH

The object of thes rather tenusual pame is a keep a number oi gewly－hatched uhhycs eqge al．be by stering them areund a stopeutarium．An ophyss is a suake－like creature fornd in the Antarctic tslands．The yousig ophysses（or ophyi？）must have floursthment wa litet eat frogs
in the two－playe version Ifill ne is dentawit ay each side of the sereen Jhe length of this the shews how munh nourkib ament each ophtss has，contamily Jecteasing II at ophreh cals a frog，its lifeline relurns to the matemum kength and the ophyss Hews by one thil．When it is 15 unis long it expires，and a smalt
，＇Stalulear， 10 Alstone Rd，Stock－ poll，Chestilte SK4 5AH

These two programs are sold logether for ether joystick or keybuncd use．Although good duse has been made of the＂Il＇s BASIC facillite in mattempt to get the utmost speed，both programs ate essentually tden． Kin They differ mandy in the yriphter used for gates，muking this very sxpensive duplication， Both are moderately challeng－ ing：you must drive cround the screcn，negotiating tones ind trees and tempting to pass Througsh enght sates．In Notor Cross only，the gates are numbered end must be negotated secquentially．You hayo conerol of kefl and righe turns only，whech can be a title confiusing as they are dependent －upon the directron in which the M．yar is heading

Thete are ive levels of play and your efforts are tumed withan the restrmetions of TI BASIC．If you complete the course inscathed，you wilk receive a tratag．I dudn＇t even rate pethetc， 15 with the computer 1 It control of the sfeed and no brakes I frequentir bectathe emtangled with the trees lf the games had eltiliered more I would have considered thas farr value for meney）P B
instructions 1．pieyabuly
＋ Eraphies
value for money

# Texas：the state of the stars 

## Here＇s a treat for owners of the TI－99／4A：five new programs reviewed by our team

## RJvets／ Charset 2 T1．99／4A E4．95

## You need－sood head for

 heighter in Rivets，though whether vou＇ts fod it a truy．y riveling expenence is arohhe mauerThe earae starts on the 2131 floor of a partially constracted sower block．The sine foreman has it in for youl When all yous workmates have gone home he makes you collect up the rivers they have teft lyong fround． Trouble is，there are panana skins scaltered．Stupputs on one sends you down ofto the nent Hoor sind loses a life．The same heppens if you muss your step on griders．When all your lives have
gone the builduts is displayed and you watch your death leap． All this proceeds in In despertare face agatith ume．There are five skell levels．As the game becornes store diffacult you are given tess tirae to finish and more banuna skins to moid
Athaugh fun at rifst，the zame hactr sufficuent variety 10 give ha lastong addictive quality．
Chrtser is a short program in whach characers have been re－ dofined and ther hexadecimal codes placed in DATA slale－ ments．）」．W
instructions playabilisy eraphus value for money


I

## Escape from ＊新 TETA 1a．ay

Pukulue Software， 35 Parker \＄I． Presion．Lancs PR2 2AH

## II ：hard and dangetous work

 heang a colptive of the evil Comm If Mical．To obtain your relente all the Ireasures from each of three liolds must be collected Fach is surrounded by a hult wall and there are two blocks of wall imade the ficldThe treasure is guarded by a hatigry man－tening monster． dete the two dithe walls prowe ．unefal hecuuse if you cen lure the fromster behind one the will momentarily stop．Then you Iake what you cun before he bectomes

Four hyperspace pils have been provided to use In each freld．Teking one will －Immediately iranspart you to Fincoliter rundom locatuon withit the lield Thas proves wery hatdy when the monaser comes 100 chose for comfort．Sometrmet however，you can find yourself re－appearitg juwt as fichar，or ＇closer＇
There are four skill ievels．At the castert you score 15 points per item，but there tre more tems sind large inner wath，At the most dufficult yote score 60 founts per item，there＇s fewer tetms and muth smaller walls．
 playabluty
semphics
value for moncy

## COMMODORE 64 PROGRAMS

## Label printer

One particularly useful job a computer printer can do 15 printing self-adhesive labels. These are avalable from many office equipment supphers and statooners in both tractor feed and fracton feed forms for around 70 p per 100.

This program allows input of the requred tines for the label of your choice and formats them for printeng. Slandard labels are 100 mm by 35 mm and this allows about seven lines of 35 characters to fit on (with a 1525 dot matrix promet). If your labels are another size, then modify the program to suit. Owners of a 1520 plotics should also the able to add colour and varable character slze routines into the program.

The program produces neat labels which can be used for many purposes, e.g. parcel labels, cassette inserts, floppy dise indexing, and anywhere else a neat set of tabels will look good.
Note: As ustal, cursor controls are included as REM statements but these need not be typed in.

## I...fiel printer

How it warks
Re-130 set up and inpul number of lines required
140-185 inpul lines for label 100-2015 print label on screen 210-2\% correct any etrors
$30 \mathrm{l}-308$ print in graphics mode if required
10-3.30 proms label in pribter lower case
341 -40e ses up for anolther tabel If required
툉.560 subrotine 10 input \# line of text

Lathel priater $\checkmark$ ariatiles
TSK7 lines of exat
A sumber of livics
IS line isput
IS characeer inpul

## Lubel printer

Hinis on conversion
Thus program should pose no problems in convering to other micros and printers
CHRS(8) priml in graphics mode (no space between lines)
CHRSM13) carriage reatit
CHHS(15) prist in normal mode
C HR\$20) deiece character
OPEN 1.4, 7 open file to prister in lower case

## Tape filer part 1

Do you have lors of music tapes, and do you have a lot of trouble trying to remember which tune is where? If so, then this program is for you.
The program comprises three sections. One allows you to creare a disc file for five cassettes with tape tengith, tutle. date and all names and artists caralogued. Another allows you to correct of modify the files you have crealed. The thard section allows you to search quickly through all your files for a partucular tume or antist (or both) and print up where this tune is to be found on your tapes.

The program is designed for dise users, although data could
also be stored on cassette tape. Scarching, however, would be very slow. Although made for storing turtes on cassette, small modifications would allow you to use the program as an index for your tecords, or even your tape or dise software.

This week's listing gives the file creation and modification roulnes. Next week, the reader section will be given to allow you to use your files.
Note: Tune and artist are filed as a single string, separated by a "spade" graphic. In the editor routine, you must put this in yourself. Total line length should be kept below 78 characters. The numbers in the data files are imporiant to the runsung of the program, and should not be removed or changed. If the artist is

> Use your new technology to the full by automatically printing out labels, and organise your music collection with part 1 of lain Murray's tape filer program

unknown, enter this as "UN",
As usual, cursor controis are given in REM statements, but these don't need to be typed in.

## Tape filer 1 <br> How il works

$40-70$ set up and title
\$2-90 ask for hughest tape on 「る
1(10-13.3 man menu selecion
146-850 reader rouline (Eee giext week]
t000-1020 input start tape number and make up fileNa.
1030-1070 input tape length for flue tapes
1080-1130 input side tale and date - for two udes
1140-1220 thput gunes and arensth
1230-1240 pist 1ure and erists into single string
1250-1360 save dath to disc
200002015 1mpul start lape number and make up ile. name
2020-2100 load dala
2110-2218 liss dari, checking for inlerrupts
2220-2120 mestu and choice selection
2330-2440 addimg tind detctang raul nes
2110-2480 resaving dala file
$2900-2960$ trap disc erfors and conisnue
3000 exil program

Tape FIIE I
*nristilen
ARUSil0) artat's names
TUSt10) tunc names
K210) sumber of references found
AL(10) lengih of artuce ${ }^{\text {b }}$ bum
Thsioj length of tune name
(1) 51000 ) data lanes

M number of highest sape on file
-MS current filename

* tape number

DAS fipua data line
, 3 number of files to be scarched for
QT,F lape to be searched
IT ime
TV tune number
bl side number
IS tune name or atile
R\$ crusp"s name
$L$ tape length
b date counter
5 sude counler
C1, C2 data counters
$K$ tesm to be talyled

Tape filer 1
Hints on converslon Apart from the upectal file bandting commands. this program should be casy to converi to tun on other micros, or wath casserte data storage NOTE: PEEK(654) - "SHIFT" pressed (1) or nor (0)

Listing for label printer

```
10 rem *** label Printer ***
2g rem *** by iasn murray (c) 1984 料*
*arem *** for home computing ueekly 粬
04 13m+秝7%
94 Poke 53281,1:Poke 53280,1
Ss rem [clr] [blue] [lower case] [lock in lower case] [3 crer cun] [11 crgm r.t]
Ag refi[rev on] [rev off]
```



```
10% rem [z erse dwn]
110 F'rint "anHow mans lines ( 1 - > )? ";
```



```
1% rem[rlr]
140 Fr.nnt "cl"
15g for }i=1\mathrm{ to a
15G rem [#r-r"dwi]
```



```
170 if len(t (<i)>335 then 150
18日 next i
```



```
15g remirzlm]
19| Frant "ब्ञा"
```




```
1GG rem [blue] [ureen] * vertacal lumes are ミhitteca "-"s
```



```
FG4 rom * vertrigal lines are shifted "->"s, horizartal are shifted "*"s.
```



```
20% rem [ulue] [crsr [u|介]
```



```
20
```




```
240 prant "allhach lane 2= wrong ( 1 -".a ', %".
```



```
Finfrocint b
```




```
2941f lem+(*)\355 then 270
2ga zoto 19t
zag mem [clr] [2 Grser dur,]
```







```
315 get as:if &\<>" " then 315
319 rem [2 cresn dwn]
3# print "scPrinting: ":open 1.4.7
3) for i=1 to z print#1,ts(i).next:pr1ntw1,chr$(15):print#1:0lase 1
3% mem [2 crsr domn]
```







```
70 prant "aKFrarit a dufterEnt label 《Y/N\rangle?"
#at get C事 If [$="凸" then 190
30 if 几事""y" thon 11年
400 goto F6a
497 men *** infut line
```



```
510 get lob
```




539 rem［crser left］［rev on］［rev off］

549 remi［ersr left］［rev on］［rev off 1

559 rem［crser left，］
560 print＂H＂：return

## Listing for tape filer

```
16 REM *** TAPE FILER ***
201 FEM **** EY IAIN MLFRP\ (C) 1964 ****
3G FEM 米米 FOR HOTIE COMPISTING WEEKLY 料*
35 FEM *** PRPT 1 OF 2 ***
40 FOKE 53280,6,POKE 53281,6
```



```
59 REM [CRSR DOWH] [FINKK] [WHITE] [CRER DOWNA]
60 SK=1 N:*=" dNHIS IS NOT HCLEPTARLE ! (G)"
```




```
FEEM[3[F_F[flif]
80 FFIFT "RTNG,IWE WIMBER CF HIGHEST THPE ON" IHFOUT "FILE '.M
```




```
99 REM [CLR] [3 CRSR DOWN]
100 PRINT "TOMdNHOU CRN\
1E14, FEM * ERCH LINE STRRTS WITH A [CRSR DOHM]
105 FRINT "则) READ A FILE"
110 PRINT "W2) CREATE A FILE"
115 PRINT "&3) EDIT & FILE"
12G PRIMT "D4% ESIT PFOGRAM"
124 FEM [2 CR:SR DOWN]
125 PRINT "餫HICHICH OHE IO YOU WFNT (1-4) ?"
```




```
998 REM *** CFERTOR SECTION ***
999 REM [CLP] [3 CRSR DOWN]
```



```
1H14 IF NKM OR NO\INT(N) OR ((N-1)`5)\INT(<N-1)/5) THEN 1月G&
```



```
15%A FOR I=N TO N+4.REM ** LODP FOR 5 TAFES **
1H3G REM [|HITE] [4 [PER JOWNN]
```



```
104% REM [2 CRSR DODN]
1MFH INPUT " बRGIVE TAFE LENGTH <IN MINUTES> ";L
```




```
1GGU FOR S=1 TO 2:PEM ** LOOF FOR 2 SIDES **
```



```
1NGG FEM [CRSR DONN] [WHITE] [CRSR LEFT]
```



```
11G FEM [CRSR JUUNM]
1110 PFINT "其IVE TITLE OF SIDE, FHN DRTE ."
1120 INPUT T$:IF LEN(T*)<2 OR LEN(T$)>39 THEN FRINT H$ GOTO 111W
1130 D⿻一未丷\(D)=T事, D=D+1
113) REM [CRSR IOUN] [LWHITE] [LIGHT BLISE] [GHITE] [LIGHT RLLE]
```



```
11C日自 IMPUT TUF
11E4 IF TU:*="X" THEN 124G
```



```
117 PEM[[RRSR IWONH] [SHITE] [ELACK] [MHITE]
```



```
1189 REM [ELACK]
119⿴囗⿱一一⿰亻⿱丶⿻工二十
12G0
```




```
12゙G REM [SFAIE] IS SHIFTED "A*
```





```
1244 FEM [CLR] [WNITE] [3 CPSR DU|N|]
```



```
12"G FEM [CRSR DOWN] [FWS ON] [R"W'S OFF]
```




```
1:79 PEM [2 CRSR IIINNI
1二BU PRINT "昭EFYING :"
```





```
13.g REM [3 ERSR ION|]
```



```
132` PEM [CRSR IUUWN] [RVS ON] [FWS OFF]
1-% FRINT "MFPESS SOFACE = TO CONTINLEE:"
1340
1350 IF N+4,3M THEN M=N+4
150日0 50T0 100
1G45 PEM 米米米 EDIT SECTION 米象
1G%+ FEM [CLR]
20%!! FRIMT "##"
2.4}4\mathrm{ FEM [2 CRGR DEW|N]
SMH5
```



```
S1S F全"TAPEFILE"+STR$(F)+STR$(F+4)
CNOLE=1 E2=0 OFEN 1,8,15,OFEN 2,8,3,F$+",S,R"
```



```
2050 INFUT#2,D事(C)
O59 REM [2 [R3R DOWN]
2050 IF C=1 THEN FRINT "MOUNDING *,F*
```




```
O0\\ ILDEE 2.CLOSE 1
2GG% REM [2 CRSR LO|N]
E 1G% PRINT "MELDADIHG COMF'LETE"
114O FEM [CRSR DOWN]
```




```
=114 FRINT"LISTING."
2115 KEM [CRSR IOLNN]
```



```
E1]FFEM [RRSR DOLUN] [RWS ON] [RVS OFF] [2 CRSR DOWN]
```



```
2120 日ET H゙年\IF H$O>" " THEN 212G
212马 䶿M [RVS ON] [RVS GFF]
Z130 FQR I=1 TO C:PRIHT I,"䀠;D$\I\;"四"
2ISG REM [CPSR DDUN] [FINK] [WHITE]
2140
```



```
NEQ OET A事:IF F&$""E" THEN 2190
#10G FEM [CNER DD|NN] [PINK][性HITE]
```



```
#BLT
< N目 NENT I
E1GG FEM [CRSR IOONN] [RVS ON] [RUS OFF]
```




```
2219 FEM [GLR] [3 CFSR DUNN]
c%2G FRINT "IM&TRYOU\EFN|."
```



## 4 PROGRAMS

```
2C'404 FFINT 'RT日IL VIEN DHTA'
C23'F FEM * EREH LINE STHFTS UITH [IF-E IMTNN]
2*4 FFIIHT "答, IEELETE IHTRA ITEM"
```






```
2こc% FE| [2 -F% [D|N|]
```






```
2%H FFRNT "MTM.|HICH ITEM <1 -",N" "It' ". IHFIIT 卜
```



```
235月 IN A-1 COTG 2360,23F0, 23B%
25G FEM *** IELETE ITEM ***
```



```
F3n+FEM *** IVSERT ITEM ***
```



```
*TS FEM [CRSR IONN]
```




```
3406 以TTD : con
```



```
240% FEM [2 CR',F LU||, ]
2419 FRINT "NNFESH!IN|", " F&
2400FEN 1,8,15,"S:"+F$:CLOEE 1
```




```
244'5 FEM [% CRSR $0||N]
こ45,G FFIHT "县FESAUIMG COMFLETE"
245% FE|\ [IFR.F I[WWN] [F!S DN] [RUS DFF]
24E9 PRINT "昨RESS A SPHICE E TO CONTINNE ; "
```



```
E450 MOTQ 1GN
```




```
2习1日 DPEN & E'15 '|" 「LIM, 1
242% FEM [4 CF SR [H|,N] [F[P|;]
```





```
2gC0 FET A(.IF R$<\" " THEN 2950
```



```
2gas FE州 *** EXIT FFOOREMM *⿻⿱口口丨刃*
```





# Beach-Head $\varepsilon 9.95$ 

US Goid, Unit 24, Tipion Trading Est, Bloomsield Rd. Tipton, W Mids DY4 9AH

The object as 10 manocivze your heet tnwards to land where you will cosinnue wirh tanks to destroy the mighty canzor Kukn-Lut. On your way you must go through sax sequences of atlanks strategics
The firgt th an denal reconnatssance in which you see a map You must decide how you whll start the game. You may go mito direct battle or use the secret passage and take the enemy off guard.

The hidden passage tas you guidag yout ship past
 Thys screen is quite tard but

## rakes the next section ease

Sequertice three is in 3D. You must shoot enemy arrcraft and an the following level atzack batte. ships. A repore is given after earh shor

Screen ive is Beach-Head. For each slap you have lefi you ge1 two batiletanks. These tenks must ravel through the defence system before blowng up Kuhn Lut on screen six. The instruc thons state your need a few lathks to succeed

The game hoads perfectly and makes very tood use of your computer's graphice and sound ablities.

Instructions playabiluty traphas value for mones

55
$40^{\circ}$ 850

## Trimb <br> Tuurnament C7.98

Terminal, 28 Church Lane. Prestwha, Manchesier M25 5AJ.

With arcade/adventure games appeanng in the shops, Iermanal is replying with a tiree-m-one arcade garne
At the start you may select one Life per gane and play all three games or have all thres lives on the game of vour choce.
The first game is a cowboy - shoot it out" sumalas to one of the early arcude machnses which started the video game craze a few vears ago.

The second game is Space Race. It involves kepang your spaceship on a path and coilecture pounts as you go. The
concept is anoriginal and not that interesting.

The last game is kammaza, on the high seas. The object is to shoot and destroy vanous planes whek tend to crash into your shup.

The grephtcs do not meorporate many new or good techniques. General quainy 15 average. 1 won't write it off because it is berter than some games alihough there is pienty of room for improvernent. No insiructions were suppled

Once you have finstied playing you get a breakdown of your scores for each life.


Audzogenic, PO Box 8日, Readoma, Ecrks
If the adversaries in thus game are typical of those met by Braish Telecont engineers who clamb ( |elegrapla poles, I'm glad 1 chose another vocation

Whilst the desigs isn't wholly foryginal, the execution is superb Display consists of a number of pantforms linked by telegraph poles. On these Ievels are located pots of gotd.
You controt Freddic. whose aum is to coliect the pors. Incvitably, they are guarded by nastes calied Grecblies. Three nasties each have a different method of trackıng Freddre , Jown Eahh scieen has different nasules including frags, spiders, crabs and savage angelic-faced foes, If they calch you they hrow you off the platforms Wous tut the erinund wis a , has , whath e
fi) Beiween screens. shor1 jumusing interludes are therformed The qually of design of the characters and their anmatuon is excelitena. Each screen is accompamed by a new, brililandy performed puece of mus.ic The game is appaljingly eddicuve and will keep you hamused for hours. I feel it is overpriced; $£ 9-£ 10$ would be nearer the mark. Try it, you won't regret at!

## Anstructuons

1pinyability
graphics
vapue for moncy
Fruntic

## insiructions <br> plavabulity

graphecs
value for money

## 13-4

$\square$

## 

# Games for hard-line addicts 

> Here's a batchi of games that will keep you glued to your computer for hours. Our panel has sweated it out first - see what they think has sweated it outhist

## Aquanciut

Interceptor Micros, Lindon Hse The Green. Tadley, Hanls

Interceptor is teally improving its standards of software. This is a firly good example of what t! now produces.

The game ts based upan guding yout submarine aroumd the caves of Shallic. There wre memy submannes, heat-secking missiles, mines end other delerrents to stop you completing your mtsston, which is to visit all the caves before returnang to your base.

Thas game is very hard. No one can say ti ss easy or repetisive Oree you have got through level you automatscally re-start
on your curtent level if yous set kil ed
A nice feature of the gane is thal you call decide how many Lues you wish to begin wih, three beng the mimamum and nune the thatimum

The graphics remind the of the tumat sutface in Scramble. Thes have been unplemented very well and seem to be flicker-free es they scratl in all four directions.
For anyone who likes Scramble-lype sames recommend this one. Althorght th is nol constant fast actwor, it is scill very good

## mstructions

playabulty
grajphes
talue for money
5-




 However. ACOS is merely a computerised version of what we do arready; if notes counter number, program tute, pius next avaslable space and last forwards to required position. Blatk tape is 'formatted' via tarrly leagthy process, and a directory header is pul on 11 To SAVE or TOAD, ACOS must be preseant, and once the directory is loaded, you press apptopriate recordet keys under programb direction and, after Progrank direction and.
Darectory lists ald tules on riterth, bui does not LOAD or SAVE al any forcreased speed Since you must load acus the thme taken 10 reach and load formanted program is actually longer that normal.
ACOS cuts tape loss belween
programs, could tady up messy lieraries, but is no subssinule for duse drive
Exira BASIC commands are most imetesting and offer caster access to sound, graplics, sprites, collisions, inferrupts and memory. The manuat is echmical. ACOS-wrulen programs need it to run so H's useless for commerctal purposes
Free game, reatorable price. II ould be useful.
D.C.
ease of use
display
value for money




1

## tters Letters Letters Letters L ers Letters Letters Letters Let

## Dimithe

Cobld one of your readers plase hep me? Two sears ago I boughe a TI-99 4A and now have the Mint. memory and Extended BASIC

My problem is that I cannot get into the Mims. memory to use the tne by line ansembler if a reader would wrile in I waild appreciate it because ar the moment t's E 70 down the drain

1 watal also like advice on a good Mstumemory game for the Ti

And hete is my list of hugh suares

Alpasier to 0,00
Car War 30,000
Alarisoft Delender 1 m
Paul Bray, Leeds


1 am writing in repy io
CR Liderwate's leties (fic $W$ 66) abulal Jet bel Wilv
Ax the game stands it is ו mposible to reasth the colthersalury reml betause of a bug
You have to jump into he midate of the bababa resul huen jump bark igasan hut there st an
orange blakk in the way that stope you

Tu fent ove thas track you have to do the folawirg AIt Retr the toader When thes is donc, type CIEAR 32767 10A1) … (OD) Press PLAY and the sade wid load bue won! rus When laad ng is complere. type the to awing

POAE GO27., O POKE 42183 I. POKF 59\%0i.82 POKE 56 (6) 1,4

You suald aiso PONE 18899.0 to give yourmelf unlimied lases of it coud be added at line 35 on the loader or left out atingether
When the atove POKEs have been entered you can then SAVE the game to sape by typing SAVE "JETSET" LINE 10* SAVE "JSWJ" CODE 32768,12768

Once SAVEd you can run the game by typug COTO 40. You will stitl need to the your colour card to enter the code to paty. but the POKEs will remove the attic bug, enabing vou to go through there as many times as vol tike, as well as letl ng you go bp the right
hand sude of the Banvan tree and thto the

Whth regard to Entrance Hades, lhis foom is a trap and on no accolint shou,d you bother to enter this room tou will lose alt your lives if you do
I hope this will help anyone who has probiems With Jet 5et W ils
L. Treese, Burtan on Trent, Mafl

## MaTly $1=1$

## Cunt

I think alt Jet Set Willy fans will like this Nou you can hase as many men as yos want
The first thing you to is load the first bit and inen break into the program Whes you hear the beeps, ston the tape Put at line ${ }^{34}$ FORE 35439,0 Then load the sext pars of the program by enterine RUN and starting the tipe.

Can nyone tell me how to gel into the conservalory roof to collect the glasses? So fas [ have wo lewied 73 Items.
It reply to 0 Grant's ctet (HC W 65) about Jet Set Wilsy have you ever been to the wille selar? There are steps leading to the forgetten abley you are to jump through the steps so thal vou can get laroigh to the forgulten abbey, which is vert hard

I think your mayazane is very good and I buy th every weck
Deal Pinder, Vorwich


I am writirg in reply to the Jet Set W ily query from CR Lnderwood
The objects in Hades do nol courl as ttems Fall ne through Hades finstanf deall) ar fumping from the ligh ledge in the walch lower leads to the off licence.

There are 60 rooms and 83 items. The bars in Rescue Esmerelde count as two items, as does the object on the brach. There are also two invisuble atems. One is ganned atromatreally when you caler the swim(13n) pool.

The onty way to reach the items in the conservatory roof for via the tight hand sade of the wall in the bankan trec However, the way up is blocked by the red coloured square at the top of the nght hand rool
Here are three POKEs
whtch w ll a.low you to reath ali the Jems and fintsh the game
PORE 35899,0 for endess lives
POKE 42183,11 to move the invisible ttem to the top ledye in the hall
POKE 46876,4 to tharge the red square into bue in the bantan tree and let you bet up the right hand side of the wail

Finallv, there is 的exit at the bottom nghl corner of the wine celiar, which isn't exact y obsous This leads to the forgotien abbey. the botiom ledge of the security guards, then under the drive and to the tree rool
D. V, Fowell, Milton Keynes


1 have found a way of jumpine to varyous scretens ofi Jet Set Whily, simnar to the method used for Manke Hiner

Fust get to the fight of the starmay on the frst latndang, then tspe WRITE IYPER Whil holdirg down the key 9. press the combination for the required foom Lnfortinalciv same of the fooms cannot be entered th this Way

My brollet has also folnd an error m Alic Alaci al the end When he firds at three bils of the kes and passes inrough the big doors, the message sats CONGRATLLATIONT instend of COVCIKAJL I. ATIOM5

Mike (uris, Weymowib, borsed

## Cin +bary

Lranem an of your excelient magazane simet assut one In the early davs the price was 35p and it looked a duliz tnagazne, but the programs and mews tems matibed those $n$ any ather magazine. Now HCW costs 45p, though I must say it is now e colourful magazine and includes lwice as many software reviews. Many of the orignal regulars are still in HCw. except the profites of software houses. Wai this interesting feature reappear?

One thing I never fail to read is the Letters page. There have been many debares in these pages Firsi of al $\mathrm{I}_{1}$ was the Oric break dowas." then the loag debases on *'my computed ts
that came the excessively hagh cost of software, and now thete hif two issues readers are talking about piracy and what compolers shuald be used for
There is no argument for pirans Because of the massse loss of revenue by soltware hodste, the price of soltware is bound to go up, so that ine soliwart houses can ensure prolec. toon against purales The compater world has sutfered more than the record business and the big sofiwate houses only sell permaps half the comes lhey would seli if this problem didn't exisl
So the only answer is 10 metude a look wilh every progtam, so the sofiuare companies say, so that the program can only tur with this lock now you will be buying an exira lem wilh your program, and if this happens an extra 52 or even IS whll be odded on the price Obvotusly it would be It every compuler owner's interest that thas should hoi happen

A lot of people hav? also said it is a waste of time buving a compulet just to play Rames on I tolally disagree with th : There are no moral rextricitiss on the use of a computer when prople speod $\mathbf{E}$ IOU. 8400 on a complater surely it's up to them what thet do with il and 55 no busmess of any. one else bonte computers are cheaper than games mashines and produce a wader and just as kood range of softhare I cansee no pomst in peonle worrying atroal whal olhet people do whth thes compsiers
Finaily thank you very mach for an interestipg magazane and some hugh ciass proyams and soltware reviews for the TI. 99 4A 1 would atso ake to thank Alarkofi for thers ralige of cartridges for the
 Dorkes kong is 299,8u0. Is thes a farr score?
N. Balram, Fringford, Onfordshire

Home Computing Weekt has no immediate plars to feorure profiles of software houses, due to shorlake of space.


I write in response to M Scal's triter (HCW 65) concerming the elvish cleating in the Hobbrt (Spectrum version).
The way 10 get through the Maget Door st 10 "wear
ming' and then 'examine door: upon whl゙h comenands the compiter will seply 'The magic door warts of elves approwithog If these commands are repeated, usually keveral Inmes, an ell' wil open the door, allowing you to pop through to the elven king's hall

An alternative route 10 the olther side of the Mage Door is to be captured by the elf on the forest rond if you are abe to avod the "pale bulbous eyes", that is'
The way to do thas is, as soon as you mett the pule bulboles cyts, 10 move once it the direction ill which you moved before meel ing the eyes. Walt fwice, und move onte agats in the same direction
Conrad Clirke, Cherisey, Surrey


First of all, thanks for a great mag Even thosigh there is e sitrich of water betwien us, it's stid mice to find oul what's happenting on the complate scere back home

1 recenly boaght Dun bibler for the VIC 20 . yalae for money" l.'a butang my computer oill Sundays will never be the same apa il If any of yan vic fars warl to give the wife grounds for divorte, then buy Dambumer Its on salc lrom Rabbil Sofiware
Bys nexie Mal
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## Deter alli planet Earth

## Save the universe from invading hostile aggressors in this space game by James crosby

Venture unto space and fight off ahen atuckera．You are at the controls of espaceship and you must first tet past Earth＇s automatic defencs to ward off hostile threats

Once you are outside the forcefield which protects Earth． you launch straight into batte with alien invaders．You have a tume limit on your task and you must strive to accomplish it and save the universe！

You have three lives and the hughest seare will be recorded．

There are two screens．In the First part the laser zaps，just making a nolse，but in the second part it fires mussiles，in an effort to thwart the evil forces trying to overcome planet Earth．
This program uses DEEK （783）instead of KEYS，smee it reads the keyboard quicker．In the second part of the game， your spaceship moves vertically along the side of the screen．

## Vinitabers

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vo－110 piot platiforto and ship $120-210$ plor eurth＇s defences
240．300 move ship
310.370 check screen and score

380－470 second screen
400－550 plot shy and alrens
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650－670 hit alien．scort
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\＄40－1034 rediefine characiers，set screen colours
1040－1270 insiruchans，tune

## Hirats on converston

POKE hasl $26 \mathrm{~A}, 10$ switches key chick and cursor off
CALLDEFX（hashiFFA）gives a warm star
DEEK（783）reads keyboard and cin be replaced by KEYS． INKEYS
SCRN thecks whut is on screen Plot can be replaced by PRINT AT
PAPER，INK ire scteen coloura

## vandie <br> Firsi screen

A，B position of shap AS（4），AS（5）launch pitiform $A S(6), A S(7), A S(8)$ earth derences

## Second screea

AS（2）your ship
AC，DO postion of shap X．AL random postion of aliens Mi massile position

## Boll screens

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